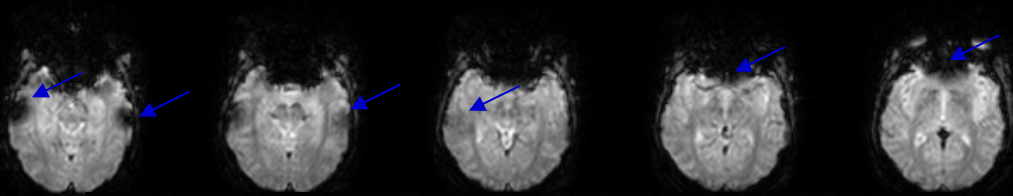
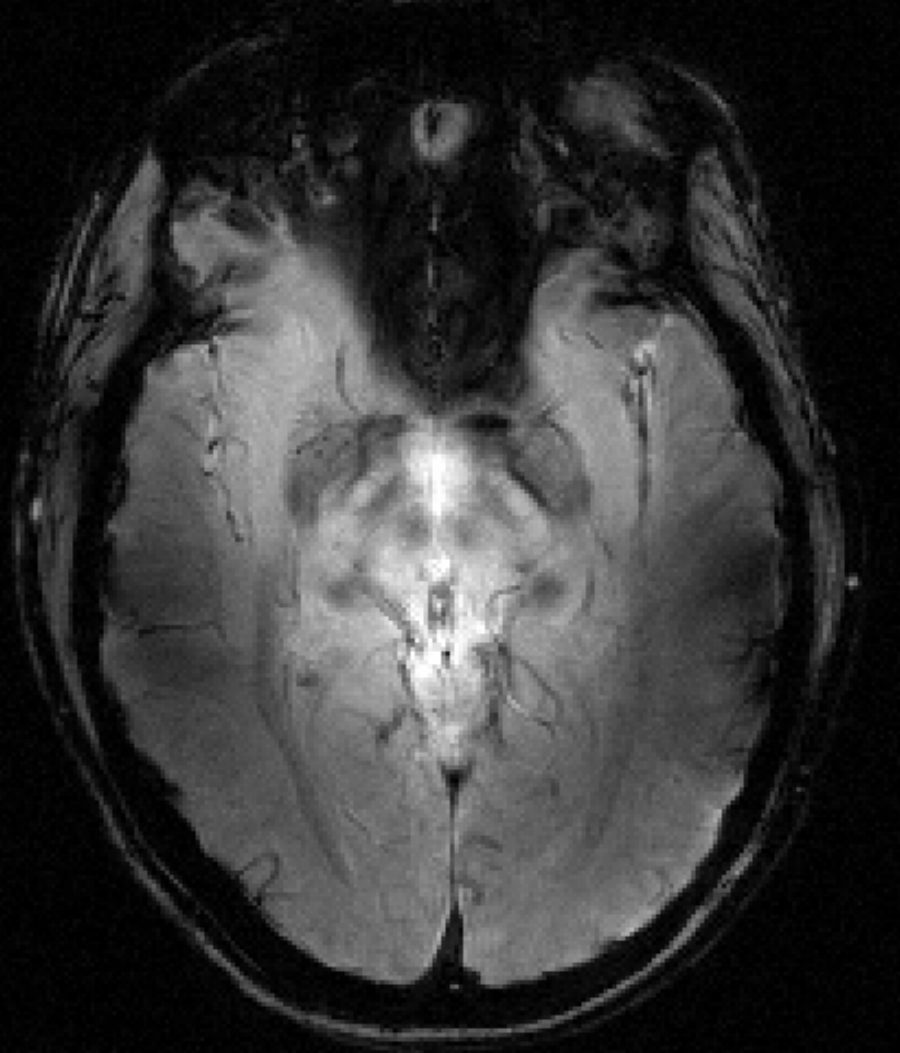


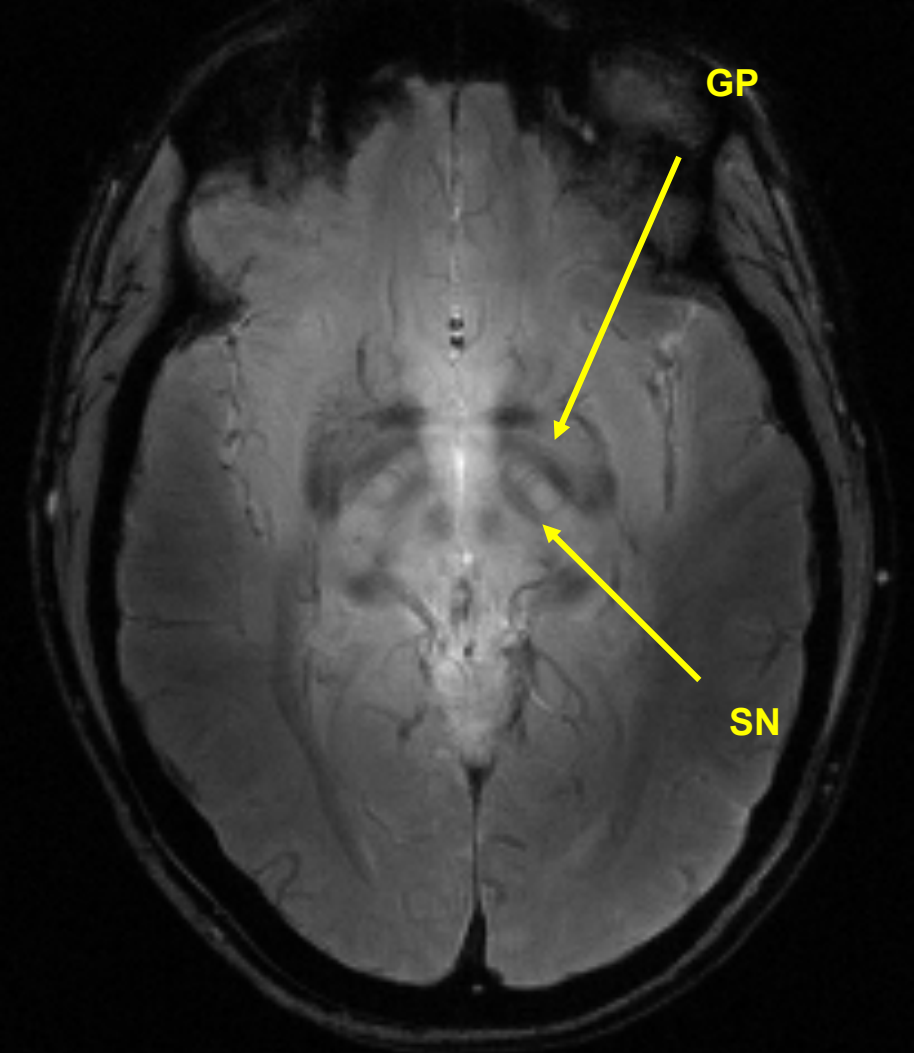
# High Field MRI: Li R01 EB000454



GE



GESEPI



PI  
ms

$T_2^*$  Image at 7.0T (TE = 15 ms)

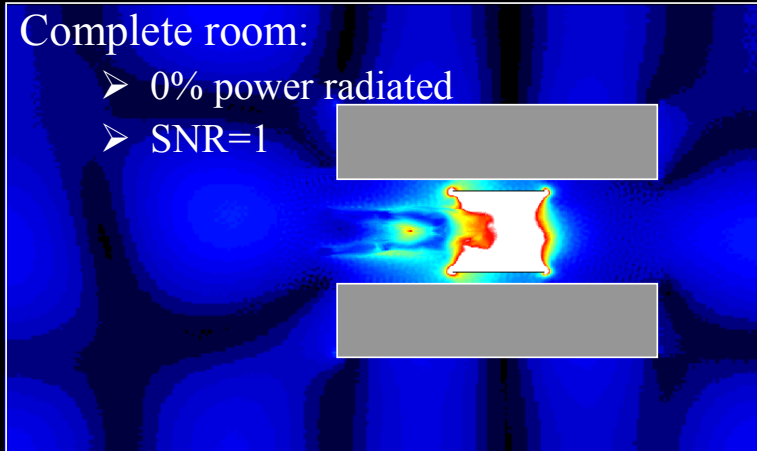
University of Minnesota  
University of Florida  
REMCON

# High Field MRI: Limitations and Solutions

## Radio Frequency Field Distortion

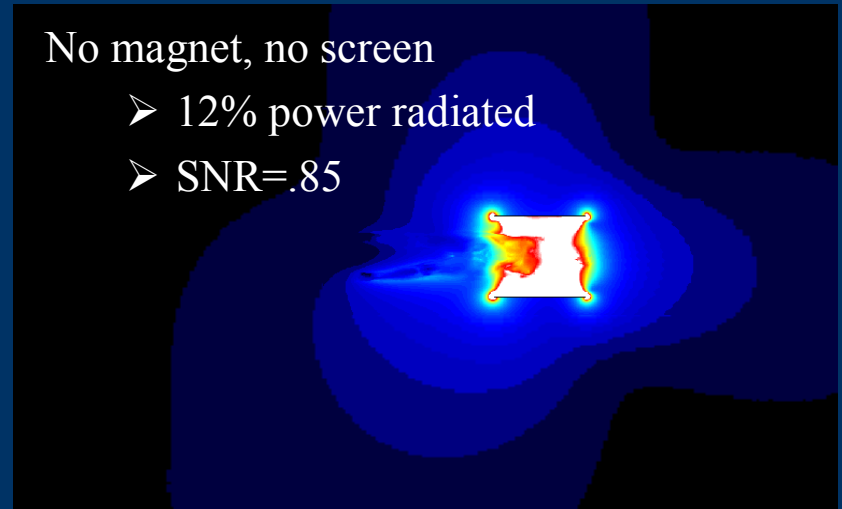
Complete room:

- 0% power radiated
- SNR=1



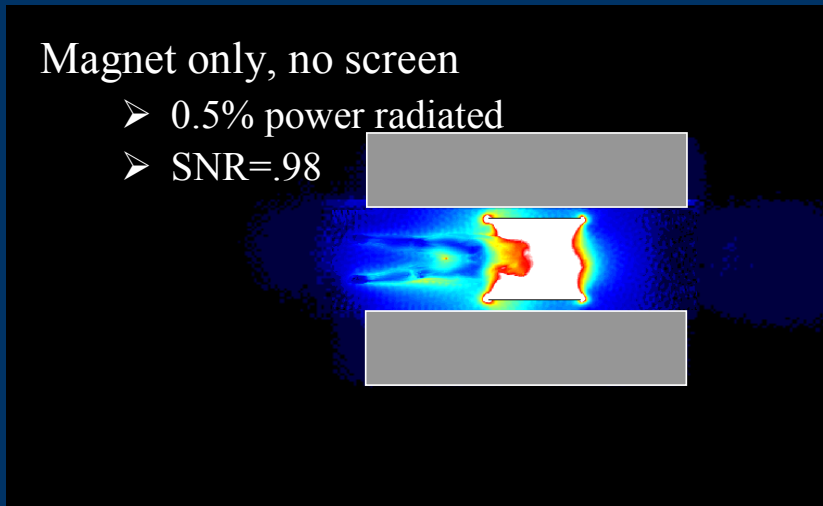
No magnet, no screen

- 12% power radiated
- SNR=.85



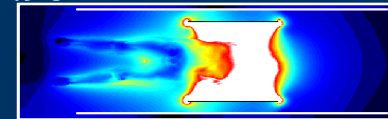
Magnet only, no screen

- 0.5% power radiated
- SNR=.98



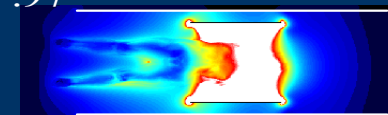
Inner bore, close PEC boundary

- 0% power radiated
- SNR=.98



Inner bore, close radiation boundary

- 0.66% power radiated
- SNR=.97



(Less than 0.002% power dissipated in coil, bore and screen)